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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,718	10/03/2003	Stacey M. Gage	MWS-031	9872
959	7590	10/22/2007		
LAHIVE & COCKFIELD, LLP ONE POST OFFICE SQUARE BOSTON, MA 02109-2127			EXAMINER OCHOA, JUAN CARLOS	
			ART UNIT 2123	PAPER NUMBER
			MAIL DATE 10/22/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No.	Applicant(s)	
	10/678,718	GAGE, STACEY M.	
	Examiner	Art Unit	
	Juan C. Ochoa	2123	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 01 October 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-5, 7-17 and 19-96.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s).  
13. ☐ Other: \_\_\_\_\_.

  
PAUL RODRIGUEZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

Continuation of 3. NOTE: The claims now contain "multiple component models". The claims previously recited "a component model". This changes the scope, which would require further search.

Continuation of 11. does NOT place the application in condition for allowance because:

Regarding the rejections under 101, the amendment appears to correct all deficiencies.

Regarding the rejection under 103. Applicant's arguments have been fully considered but they are not persuasive.

Marc Rauw, (Rauw hereinafter), FDC 1.2 - A Simulink Toolbox for Flight Dynamics and Control Analysis

As to claims 38, 39-41, 42-53, 54-59, and 80-86, Applicant argues, (see page 21, 5th paragraph to page 22, 3rd paragraph, page 23, 4th-5th paragraph, and page 26, 5th paragraph to page 27, 1st paragraph), that Rauw fails to teach "a discrete wind turbulence model" and that the "AeroSim manual, however, is silent about whether the turbulence block represents a discrete wind turbulence model or a continuous wind turbulence model". Examiner relies upon Rauw's "3×1 VECTOR" (see "Inputs: VelW = the 3×1 VECTOR of wind-axes velocities" and "Outputs: TurbVel = the 3×1 VECTOR of turbulence velocities" in the same Rauw page 65) to teach the limitation of "discrete", since Rauw's 3×1 vector is not continuous.

As to claims 60-72 and 87-96, Applicant argues, (see page 22, 4th paragraph to page 23, 3rd paragraph and page 23, last paragraph to page 24, 2nd paragraph), that Rauw fails to teach "at least one model for equations of motion with simple variable mass and at least one model for equations of motion with custom variable mass". Examiner relies upon Rauw's "1. Parameters:

Initial mass = the initial value for the fuel flow integrator.

Tank structure = a Matlab structure which contains the tank parameters read from the JSBSim configuration file.

2. Inputs:

MassFlow = the mass fuel flow out of the tank (use negative input if the fuel flows into the tank

...

3. Outputs:

current mass of the fuel in the tank)" (see Rauw page 177, col. 1 to page 177, col. 2, line 1) to teach the limitations of simple and custom variable mass, since Rauw's model incorporates mass fuel flow out of and/or into the tank.

As to claims 3, 15, 25, 26-37, and 73-79 Applicant argues, (see page 24, 3rd paragraph to page 26, 4th paragraph, and page 27, 2nd-5th paragraphs), that Rauw fails to teach "a non-standard day atmosphere model". In the previous Office action, the Examiner exposed his claim interpretation not to limit the scope of Applicant's invention. Applicant argues "the present application describes an exemplary embodiment with the geopotential altitude input, a non standard day atmosphere model may or may not have the geopotential altitude input. The use of the geopotential altitude input does not necessarily mean a non standard day atmosphere model" (see page 25, 3rd paragraph). According to the Examiner's claim interpretation and Applicant's argument of page 25, 3rd paragraph; the art previously relied upon teaches the limitations in question. Therefore it is the Examiner's position that the cited references teach the claims and the rejections are maintained.